F *i* s h e r

*Pulp&Paper **Worldwide**™*

USER'S MANUAL
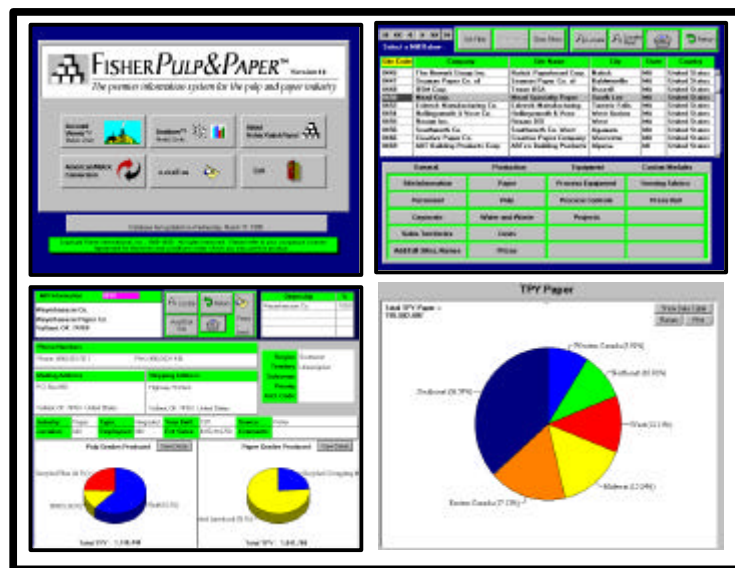
F*i*sher
International, Inc.

Version 4.1

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INTRODUCTION

About Fisher International, Inc.

About Fisher Pulp&Paper Worldwide^{TM}

About This User's Manual

About Fisher International, Inc.

Fisher International, Inc. is a marketing services and support company whose mission is to help decision makers in the pulp & paper industry access, manage, and put to strategic and tactical use high quality, in-depth marketplace intelligence.

Founded in 1985 and based in South Norwalk, CT, Fisher International directs its products and services toward pulp and paper mill suppliers who are seeking to market their products and services with greater precision and greater efficiency.

Fisher International's consistent ability over the past 15 years to anticipate and meet the needs of its clients is built around four key factors: (1) its deeply-rooted experience in the pulp and paper industry; (2) the overall marketing expertise of its principals; (3) its company-wide commitment to customer service; and (4) a proprietary research and software engineering process that transcends the limitations of conventional databases and other information sources.

About Fisher Pulp&Paper Worldwide™

Fisher Pulp&Paper Worldwide (FPWW) is the pulp and paper industry's most powerful and authoritative information resource. It provides instant access to in-depth, highly accurate information about *every* pulp and paper mill in North America and virtually every mill elsewhere in the world that is producing at least 50 tons of paper per day.

But more from being simply a *storehouse* of critical market intelligence, FPWW is a strategic business tool that can be used to perform a multitude of strategic and tactical functions, including the following:

- Track market share data (past and present) in virtually every purchasing segment of the paper and pulp and industry

- Create highly targeted, highly accurate mailing lists

- Define sales territories

- Gather complete data on all mills in which company products are installed

- Identify after-market potential in mills throughout the world

- Identify those mills whose equipment history and status make them likely prospects for upgrades

- Gather targeted data for sales presentations and proposals

(**Note:** This manual focuses exclusively on the *technical* aspects of FPWW—how you actually run the program. Information about the strategic and tactical uses of the program is available through other sources. To find out more, call 1-203-854-5390.)

The Program at a Glance

FPWW has been expressly designed to help you access the information you need quickly and easily, regardless of how familiar you are with either computers or databases. The more you know about the pulp and paper industry, of course, the more you will able to do with the program and its many features. But FPWW users with even minimal knowledge of the paper and pulp industry can still run key functions. Some features of the program you should know about:

- **Menu-Driven**. FPWW is a menu-driven program. The navigation choices are clearly identified on each screen, and each option you click on produces a new screen or drop-down menu that lets you choose what you want with a simple click of the mouse.

- **Pulp and paper industry specific**. FPWW was created by specialists in the pulp and paper industry. The program uses standard industry terminology to describe all aspects of mill activity, including paper grades and paper machine components.

- **Flexible.** FPWW allows you to add your own information (e-mail addresses, personal data about individual clients, etc). in designated fields, as a supplement to the information that is already there. This information is *not* affected by our periodic updates.

About This User's Manual

We've worked very hard to make Fisher Pulp&Paper Worldwide so user-friendly that you don't really need a detailed manual to take advantage of most of its many features. We hope that the instructions we've supplied in this user's manual will answer any remaining questions you may have.

But in the event you run into a problem or have any question about the program don't hesitate to call Fisher International, Inc. Customer Support, at 1-203-854-5390. Remember, your license agreement includes unlimited customer phone support.

1

INSTALLATION

Overview

Standalone Installation

Network Installation

Overview

The Fisher Pulp&Paper Worldwide (FPWW) program can be installed on either a standalone machine or a network. A *standalone* installation sets the program up on the hard drive of an individual machine. A *network* installation allows users to access the program via a local area network and makes it possible for queries and your data entries (additional contact names, sales territories, etc.) to be shared.

Standalone Installation

Before installing the program from the CD-ROM, you should check to see whether your computer meets the minimum requirements. If you have any questions about a standalone installation, feel free to call Fisher International, Inc. Technical Support at 1-203-854-5390.

SYSTEM REQUIREMENTS

- Operating System: Microsoft Windows 95, 98 or NT

- RAM: 16Mb of memory

- Hard Disk space: Requires between 30 and 130 megabytes of free space, depending on the number of information modules you have purchased.

INSTALLATION INSTRUCTIONS

Here are the steps:

1. **Insert CD-ROM into the proper drive.**

2. **Select "Start" on your Windows desktop and scroll to "Run."**

3. **Type in the letter of the CD-ROM drive, followed by a colon, backslash, and "Setup.exe" (Example: D:\setup.exe).**
   Note: The default installation drive is C:\fp, but you can place the program wherever you want by assigning a different drive letter and folder.

4. **Follow the installation instructions on the screen.**

5. **When prompted, select "Standalone Installation."**

INITIALIZING THE SYSTEM

The first time you open FPWW, the program will need to go through an initialization process. This process should take only a few minutes.

SELECTING MEASUREMENT PREFERENCES

You will have the option to choose how you want to view all measurements in the database. Your choices are: American units or Metric units.

Note: You can switch between measurement systems at anytime. Simply go to the OPENING MENU and click on the **American/Metric Conversion** button.

Network Installation

FPWW is compatible with all standard LAN software, including Novell Netware, Windows NT, IBM LAN server, MS Lan Manager, and Peer-to-Peer Networks. If you or your network administrator has any question about network installation, feel free to call Fisher International, Inc. Technical Support at 1-203-854-5390.

SYSTEM REQUIREMENTS

- Operating System: Microsoft Windows 95, 98 or NT

- RAM: 16Mb of memory

- Hard Disk space: Requires between 30 and 130 megabytes of free space, depending on the number of information modules you have purchased.

- User's rights: All users must have "read/write/create" rights to the directory in which you install FPWW.

INSTALLATION INSTRUCTIONS

Network installation procedures are similar to a standalone installation, the main difference involve configuration procedures and setting up individual workstations. Here are the steps:

1. **Run "set up" program.**

   You access the "set up" program by doing the following:

   - Insert CD-ROM into the proper drive.

   - Select "Start" on your Windows desktop and scroll to "Run."

   - Type in the drive letter, followed by a colon, backslash, and "setup.exe" (*Example*: D:\setup.exe).

   - Follow installation instructions on the screen.

   - When prompted, select "Network Installation" and indicate the directory location.

Installation Instructions, cont.

2. **Configure BDE**

   When you're given the screen instruction, "Configure BDE" you need to map the network drive.

   Here are the steps:

   - When asked to configure BDE, click on "Drivers," and then on "Native."

   - Select Paradox.

   - In the field labeled "Net Dir," type in the name of the drive and directory where you have installed the program, followed by "\net." *Example*: P:\FP\net

3. **Set up individual workstations.**

   The final step in the network installation is setting up individual workstations. Here are the steps:

   - Run "setup.exe" from the network location where FPWW is installed.

   - Follow the steps outlined on the screen.

   - When the system asks for a directory for storing temporary faults, choose between default (c:\fp) or type in your own location

2

THE BASICS

Opening the Program

An Overview of ACCOUNT VIEWER™

ACCOUNT VIEWER: The Basic Moves

Printing Reports

Opening the Program

You can launch FPWW in two ways (1) by double-clicking on the Fisher Icon on your desktop; and (2) by accessing the program in the FPWW program group in your START menu. When the program opens, you will see the following screen:

FISHER*PULP&PAPER*™ Version 4.0

The premier information system for the pulp and paper industry

Account Viewer™ Metric Units	Analyzer™ Metric Units	About Fisher*Pulp&Paper*
American/Metric Conversion	e-mail us	Exit

Database last updated on Wednesday, March 17, 1999

AT A GLANCE
Here are explanations for each of the buttons located on the OPENING MENU:

Account Viewer. Allows you to access details on each mill in the database.

Analyzer. Lets you perform in a matter of moments tasks that might otherwise take days, including lists, graphs, tables, and mailing lists.

About Fisher*Pulp&Paper*. Gives Fisher International, Inc. contact information.

American Metric Conversation. Converts metric measurements to American measurements.

E-Mail. Enables you to send us an e-mail message quickly.
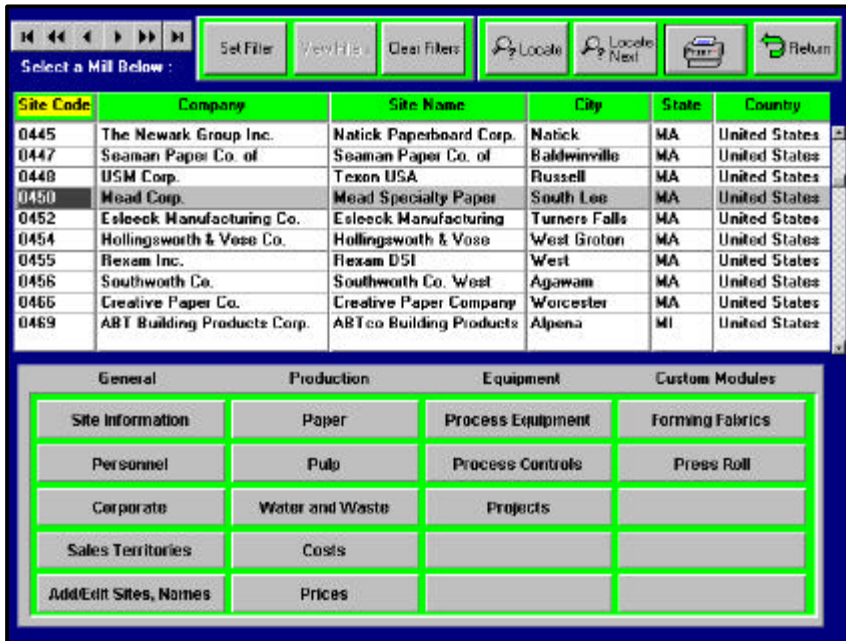
Exit. Lets you exit the program.

An Overview of ACCOUNT VIEWER™

ACCOUNT VIEWER is the "gateway" to the database. It gives you instant access to in-depth information about all the mills that are profiled in the database.

ACCESSING ACCOUNT VIEWER

You access ACCOUNT VIEWER by pressing the **Account Viewer** button on the OPENING MENU. Doing so will produce the following screen:

AT A GLANCE
Here is an explanation of the three sections of the ACCOUNT VIEWER main screen:

Navigation Section (top) Enables you to move efficiently throughout the listing of mills.

Mill Listing (center) Lists all mills in FPWW. This is where you select a mill that you want to find additional information about. It lists:

- **Site Code.** The number we assign to each mill.

- **Company.** Mill owner.

- **Site Name.** Mill name.

- **City, State, Country.** Location.

Information Groups (bottom) Brings you detailed information on a mill.

ACCOUNT VIEWER: The Basic Moves

As long as you are in ACCOUNT VIEWER, you can access every mill in the database. Once you've selected an individual mill (you click on the line to highlight it), you're able to look within that listing to get the information you're seeking.

ACCESSING MILLS

You can access mills with ACCOUNT VIEWER in two ways: with your mouse or with the cursor keys on your keyboard. You can use the keyboard cursor keys to move up and down and side to side in the mill listings (much as you would with any spreadsheet). But to call up information and move from menu to menu, you will need to use the mouse.

Using the arrow buttons

The *Arrow Keys* (in the upper left-hand corner of the ACCOUNT VIEWER screen) operate much like the cursor keys on your keyboard. You can use them to move quickly or deliberately up and down the list. Here's what the keys do:

|<   Move to the top of the list

<<   Move quickly to the top of the list

<   Move slowly to the top of the list

>   Move slowly to the bottom of the list

>>   Move quickly to the bottom of the list

>| Move to the bottom of list

Using scroll bars

The *Scroll Bar* at the far right of the screen allows you to move up and down the list of mills quickly by using your mouse.

Field headers and alphabetizing

The *Field Headers* are located in the green bar running horizontally across the middle top of your screen. To alphabetize the contents of any of the columns, simply click on any of the green column headers. The square you click on will turn yellow, and the contents of that column will be sorted.

USING LOCATE

LOCATE is the most efficient way to access an individual mill. Here are the steps:

1. **Click on the "Locate" button in the top row of** ACCOUNT VIEWER**.**

2. **Choose the search category (city, state, etc.)**

    Use the downward arrow located in the field box to select from the list of choices.

3. **Type in the name or number you are searching for (i.e. name of city, state, mill).**

    You can use a partial word in your search as well. To do this, type the first few letters of the word followed by two periods. (Atla.. for Atlanta)

4. **Click on OK.**

    The first mill in the listing that meets your search value will be highlighted in gray.
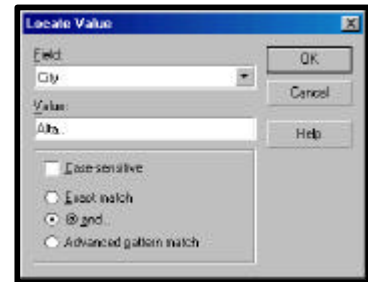
If more than one mill in the database meets your specs, you locate the next mill by clicking on **Locate Next**.

USING FILTERS

Filters enable you to fine-tune your list of mills according to specific criteria, such as company, division/site name, city, state, etc. When you set any filter, you are telling FPWW that you're looking for *only* those mills that fall into one of the categories that you have used as your filter criteria. Here are the steps:

1. **Click on the "Set Filter" button on** ACCOUNT VIEWER **screen.**

2. **Scroll down and highlight the criteria you want to use as the filter.**

3. **Click on OK.**

4. **Make your selection from the option box.**

5. **Use the double arrow key to bring your selection to the right side of the screen or use a double mouse click.**

6. **Click on OK.**

The list of mills in ACCOUNT VIEWER will include only those locations that meet your search criteria.

CLEARING FILTERS

To view an entire list of mills, unfiltered, click on the **Clear Filters** button. It will clear whatever filters you've previously set.

Printing Reports

The information that appears on screen can be printed anytime you see a **Print** button, and will appear in a report-style format. You have several options. The two main options are (1) printing from any screen that offers you the option or (2) selecting reports from a list of choices directly from the main ACCOUNT VIEWER screen without having to select the mills ahead of time.

PRINTING SELECT PROFILES FROM ACCOUNT VIEWER

You can print information profiles of mills directly from the main ACCOUNT VIEWER screen. You have several options, such as:

- Mill information
- Personnel
- Paper Production
- Pulping Equipment
- Mill Costs

FPWW gives you a choice between printing profiles on the current mill in the listing (the mill that is highlighted) or selecting a group of mills. Here are the steps:

1. **Click on the "Print" icon from the main** ACCOUNT VIEWER **screen.**

2. **Choose whether you want to print reports for one mill or for many mills.**

   If you select "Only the Current Mill," you will print reports for the mill you have highlighted on the main ACCOUNT VIEWER screen. If you select more than one mill, a special screen will appear enabling you to make your choice.

Printing Select Profiles, cont.

3. Select the mills.

You can select the mills, for which you want to print reports, in two ways: (1) by clicking the "YorN" (yes or no) field on any listing; or (2) by double clicking on any field in the listing. You can also find mills on this screen by using **Locate**.

4. Select the kind of report you want to print.

Once you have made your mill selection, you'll be asked to select the kinds of reports you would like to print. If you select **All Reports**, you will get a print out of all of the information on that mill in a report format. If you select

Select Reports, you'll be able to choose individual reports.

3

ACCOUNT VIEWER

ACCOUNT VIEWER: an Overview

Getting General Information

Getting Production Information

Getting Equipment Information

ACCOUNT VIEWER™: an Overview

Once you've located a particular mill, you're now in a position to look at detailed information on that mill. As you can see from the menu below (the lower portion of ACCOUNT VIEWER), the information has been organized into a series of individual modules. By clicking on any of the buttons below, you will call up screens with more detailed information.

General	Production	Equipment	Custom Modules
Site Information	Paper	Process Equipment	Forming Fabrics
Personnel	Pulp	Process Controls	Press Roll
Corporate	Water and Waste	Projects	
Sales Territories	Costs		
Add/Edit Sites, Names	Prices		

The pages that follow will give you a glimpse of the screens that come into view and what information you will find—when you click on any of the above buttons.

Getting General Information
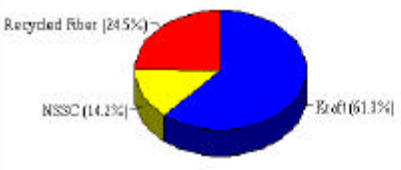
General information about a mill includes address information, personnel, corporate ownership, sales territory assignments and the opportunity to edit information. You access this information by clicking the buttons located in the bottom left corner of ACCOUNT VIEWER. The following pages will explain the details and features of each screen.

- SITE INFORMATION. Address detail, telephone and fax numbers, pulp and paper production snapshot, mill ownership.

- PERSONNEL. Key decision makers, titles, areas of responsibilities.

- CORPORATE INFORMATION. Information about the corporate owner of the mill.

- SALES TERRITORIES. Lets you assign your own sales territories, districts or regions to any mill in the database.

- ADD/EDIT SITES, NAMES. Add your own contact names, telephone numbers, locations.

Site Information

The SITE INFORMATION screen provides a general snapshot of the mill—the "who," "what," and "where." Clicking on the **Site Information** button, located at the bottom left of the main ACCOUNT VIEWER screen, after you have highlighted a mill will produce a screen that looks as follows.
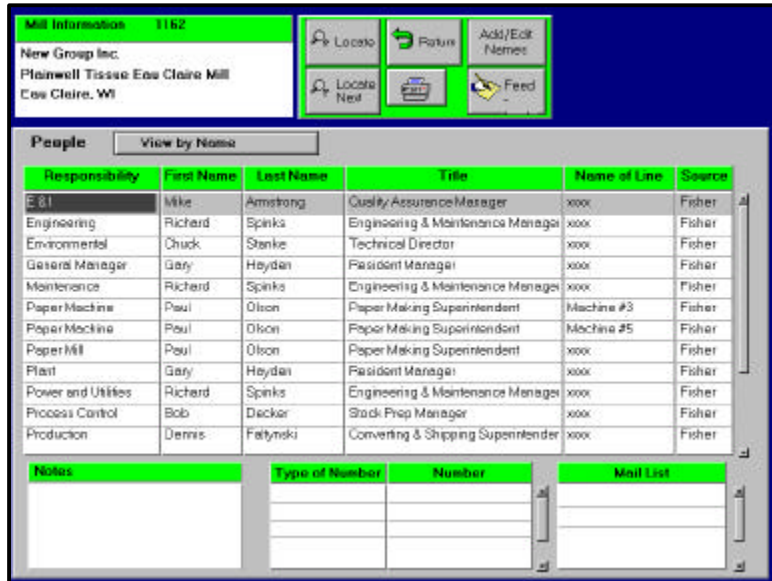
AT A GLANCE

SITE INFORMATION provides you with the following information:

- Mailing and shipping address
- Site number (A number we assign each mill)
- Ownership
- Phone numbers
- Mailing address
- Shipping address
- Type of mill
- Year built
- Estimated sales
- Pulp grades produced
- Paper grades produced

Personnel

The PERSONNEL screen identifies the key decision-makers at each mill. Because a person's title doesn't necessarily indicate his or her full range of responsibility, decision makers are listed by "area of responsibility" rather than by "title". This information can be accessed by clicking on the **Personnel** button located on the main ACCOUNT VIEWER screen. Here is a look at a typical screen:

VIEWING OPTIONS

You can view personnel in two ways: (1) by area of responsibility and (2) by last name. The screen shot above is organized by area of responsibilty. To switch views, you click on the **View by Name** button located just under the *Mill Information* section in the left-corner of the screen.

ADDING OR EDITING NAMES

If you have other contacts at the mill or if you have notes on an individual, you can enter that information. To access the editing screen, press the **Add/Edit Names** button located at the top of the screen. For more information on how to take advantage of this feature, see page 33.
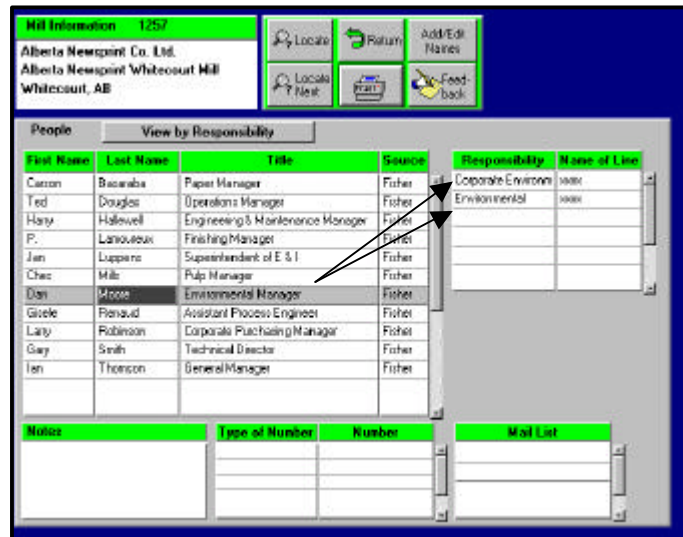
VIEWING PERSONNEL BY NAME

PERSONNEL (VIEW BY NAME) screen lists personnel alphabetically by last name.

To see detailed information on an individual, highlight the name by clicking on it with your mouse. The *Responsibility*, *Notes*, *Numbers* and *Mailing List* sections change to show information for that individual. If an individual is in charge of more than one area, they will have multiple responsibilities listed.

Example: Dan Moore is the Environmental Manager for this mill as well as being in charge on the corporate level.

The "xxxx" under the *Name of Line* section means that field does not apply to that individual. Dan Moore is in charge of environmental issues at the mill, but he is not in charge of any particular line.

Corporate Information

The CORPORATE screen provides information about the corporate owner of the mill. You access this information, by clicking on the **Corporate** button in the general column of ACCOUNT VIEWER. Along with address and telephone information, this screen compiles the pulp and paper production information for all of that corporation's mills and presents it in a pie chart.

AT A GLANCE

CORPORATE INFORMATION provides you with the following information:

- Mill information
- Phone numbers
- Mailing address
- Shipping address
- Pulp grades produced throughout corporation
- Paper grades produced throughout corporation

Sales Territories

SALES TERRITORIES is a unique feature of FPWW that allows you to integrate your own sales territory information with the information stored in the database. Once you have set up your own regions, districts, territories and distributors, you can call up information specific to each of these designations. If you need help, Fisher International, Inc. can work with you to set up a highly efficient and focused sales management system. For more information, call Customer Support, at 1-203-854-5390.

Adding or Editing Sites and Names

One of the most power features of FPWW is the opportunity it gives you to integrate your own information into the database. This information will *not* be affected when you install our semi-annual updates.

The steps below explain how to edit personnel and site information. If you have selected **Add/Edit** from either the MILL INFORMATION or PERSONNEL screen, start with step number 3.

1. **Working from** ACCOUNT VIEWER**, highlight the mill whose information you want to edit or add to.**

2. **Click on "Add/Edit Sites, Names" button.**
    This button is located in the bottom left of the screen**.**

3. **Make "edit" selection from top menu buttons.**

    You have three choices**:**

    - **Address Detail.** Change address information, add a new site.
    - **Edit Name.** Add direct telephone numbers, mailing lists or areas of responsibility.
    - **Insert Name.** Add a new name to the database.

4. **Make selection from top menu buttons on the next screen.**
    Example: insert name

5. **Input information in the appropriate categories.**
    If you want to add a telephone number, mailing list or area of responsibility, click on the add button beneath the section**.**

6. **Select "Leave Edit."**

Getting Production Information

Production information about a mill includes paper and pulp production details, water and waste usage and treatment, comparison cost information and historical price figures. You access this information by clicking the buttons located in the second column form the left at the bottom of the main ACCOUNT VIEWER screen. Here's a closer look at the information you can access from this section of the database.

- PAPER. Type of paper being produced on machines, including capacity, grade information, bleach status, original supplier, year, speed, width, trim, etc.

- PULP. Type of pulp produced, including bleached status, bleach sequence, yearly production, etc.

- WATER AND WASTE. Information on both influent and effluent water, process and cooling water in mill, primary and secondary treatment methods.

- COSTS. Estimated costs of producing different grades of paper, and relative ranking in industry, including cost breakouts.

- PRICES. Trend analysis for various grades of paper.

Paper Production

The PAPER PRODUCTION screen gives you production data for each individual machine in a mill. This information ranges from bleached status to basis weights to days of operation per year. The *Machine Information, Furnish* and *Finished Products* sections of the screen will change to reflect the machine you have highlighted in the *Paper Production* section.

Mill Information 0386

Mead Corp.
Mead Paper Div. Rumford Mill
Rumford, ME

Locate | Return | Feedback
Locate? Next | Print

Machine #5

Paper Production 5 / 9

Name of Line	Major Grade	Bleached?	Coated?	Acid?	On/Off Mach	Low/High Basis Wt	Sq.Ft.	Days Oper	Yearly Prod.
Machine #10	Printing and Writing	Bleached	Coated	Acid	On	50 80	3300	363	136,125
Machine #11	Printing and Writing	Bleached	Coated	Acid	On	38 80	3300	363	94,380
Machine #12	Printing and Writing	Bleached	Coated	Acid	On	38 80	3300	363	81,675
Machine #15	Printing and Writing	Bleached	Coated	Neutral	On	32 50	3300	363	226,875
Machine #5	Printing and Writing	Bleached	Uncoated	Acid	xxx	30 71	3300	360	28,800
Machine #7	Printing and Writing	Bleached	Uncoated	Acid	xxx	30 71	3300	360	32,400
Machine #8	Printing and Writing	Bleached	Uncoated	Acid	xxx	30 71	3300	360	32,400

Machine Information   **Total Mill Production :** **694,095**

Original Supplier	Original Year	Width	Trim	Maximum Speed	Daily Capacity
Rice Barton	1950	152 Inches	134 Trim	750 FPM	80 TPD

Furnish

Furnish	Fiber	Origin	TPY	%Tot	%Pur
Ash	xxxx	xxxx	2,880	10	100
Kraft	Hardwood	Northern	12,960	45	0
Kraft	Softwood	Northern	10,368	36	0

Finished Products

Finished Products	Quality	SC	Grade
Business Paper	xxxx	xxxx	Uncoated Freeshee

AT A GLANCE

PAPER PRODUCTION provides you with the following information:
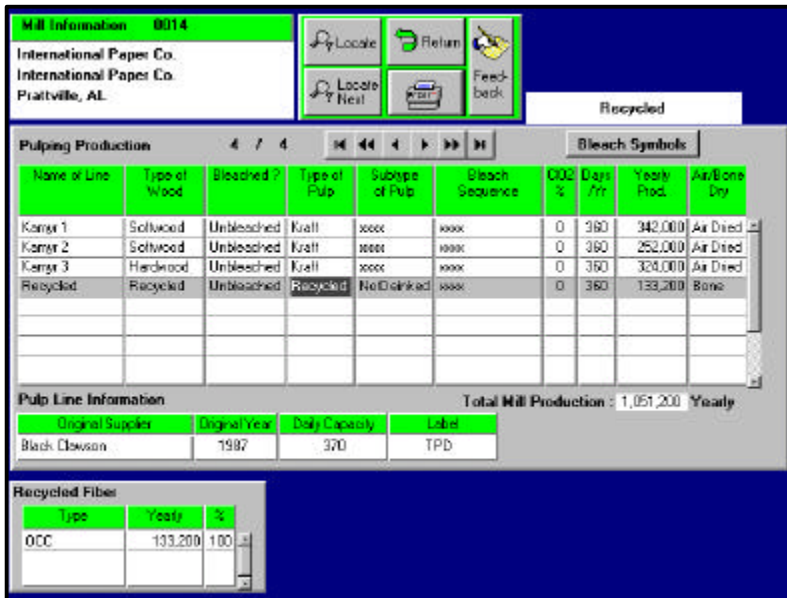
- Bleached status
- Coated status
- Basis weights
- Days operated
- Yearly production
- Major grade and grade
- Machine information
- Furnish
- Fiber type
- Finished products

Pulp Production

The PULP PRODUCTION screen details the type of wood or pulp used in the mill, including production numbers. To view this screen, click on the **Pulp Production** button located in the production column at the bottom of the ACCOUNT VIEWER screen.

The *Pulp Line* and *Recycled Fiber* sections, at the bottom of the screen, are dependent on the line you have selected in the *Pulp Production* section.

The **Bleach Symbols** button opens a look up chart that lists abbreviations for the chemicals listed in the bleach sequences.

AT A GLANCE

PULP PRODUCTION provides you with the following information:

- Type of wood
- Bleach sequence
- Type and subtype of pulp
- Yearly production
- Recycled fiber

Water and Waste

The WATER AND WASTE screen tracks water usage and sludge production, and also lists treatment methods. To access this screen, click on the **Water and Waste** button located at the bottom of the ACCOUNT VIEWER screen.

AT A GLANCE

WATER AND WASTE provides you with the following information:

- Mill section
- Source/destination
- Volume
- Treatment type and description

Costs

The COST screen gives you a comparative look at how this particular mill's costs compare with (1) industry; (2) the low cost producer; (3) the high cost producer; and (4) the industry average. This screen also provides a breakout of the cost of production per ton of grade produced for the mill you have selected.

To access this information, click on the **Costs** button located at the bottom of the ACCOUNT VIEWER screen.
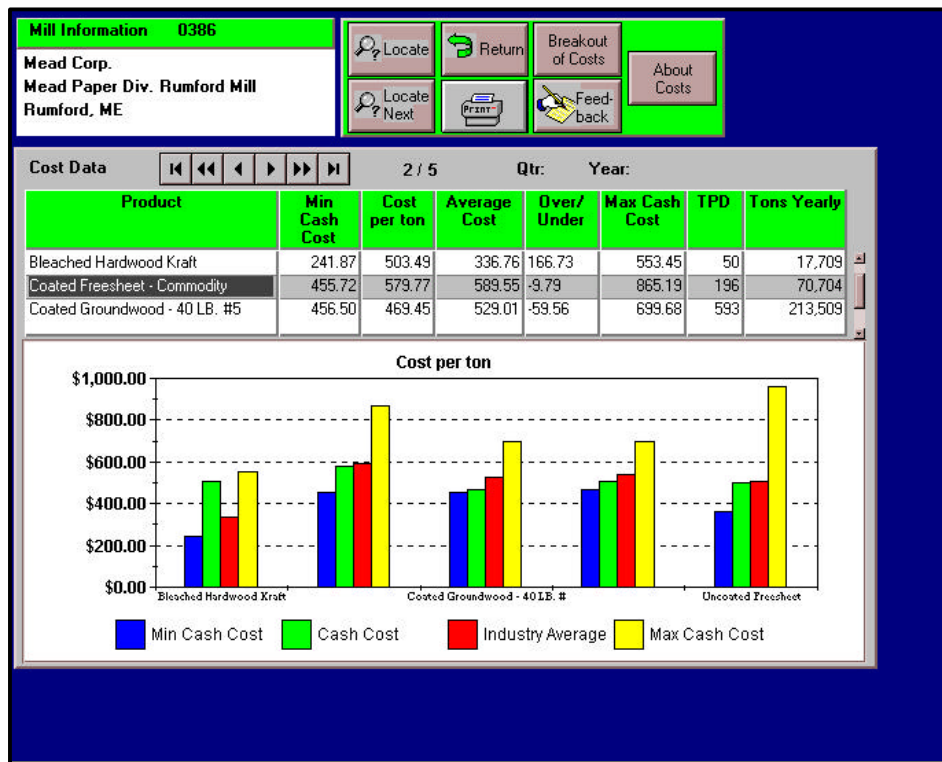
AT A GLANCE

Minimum cash cost. The lowest cost across all mills producing that grade of paper.

Mill cost per ton. Costs for that mill.

Average cost. The average cost across all mills producing that grade of paper.

Over/under. Where this mill lies against the average.

Maximum cash cost. The highest cost across all mills producing that grade of paper.

COST BREAKOUT

To see a mill's specific costs, compared with other mills making the same grade of paper, click on the **Breakout of Costs** button from the main COST screen. To choose a different grade of paper, select another grade from the drop down menu located in the left center of the screen.
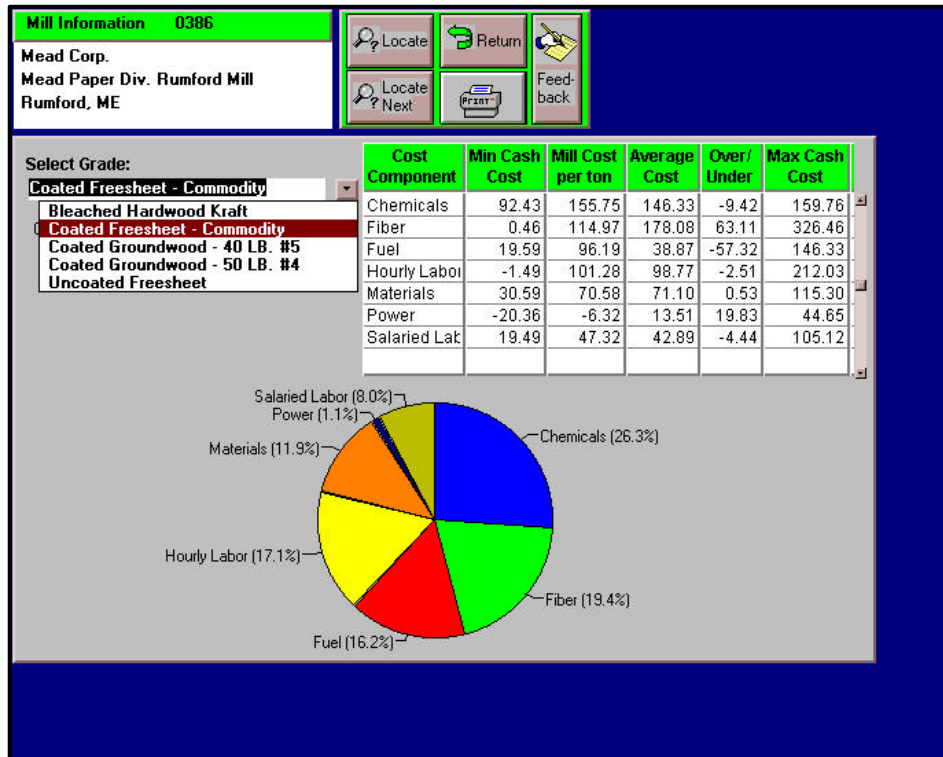
AT A GLANCE

COSTS includes details on the following components.

- Chemicals
- Fiber
- Fuel
- Hourly labor
- Materials
- Power
- Salaried labor

For definitions of the cost components, see Appendix.

Prices

PRICES screen shows the transaction prices from 1970 to the present for various grades of paper. To view this information, click on the **Prices** button located at the bottom of the ACCOUNT VIEWER screen.
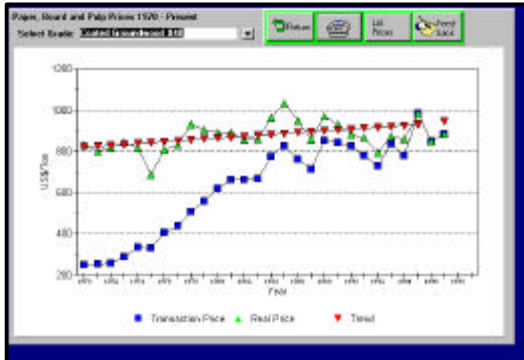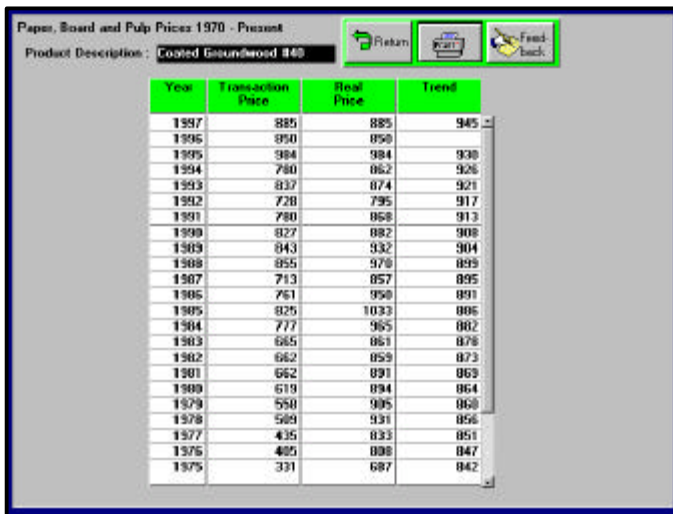
AT A GLANCE

PRICES provides you with the following data:

- Transaction price
- Real price
- Trend
- Detailed list of the prices that make up the graph

The **List Prices** button located at the top of the PRICES screen will give you data behind the graph.

Getting Equipment Information
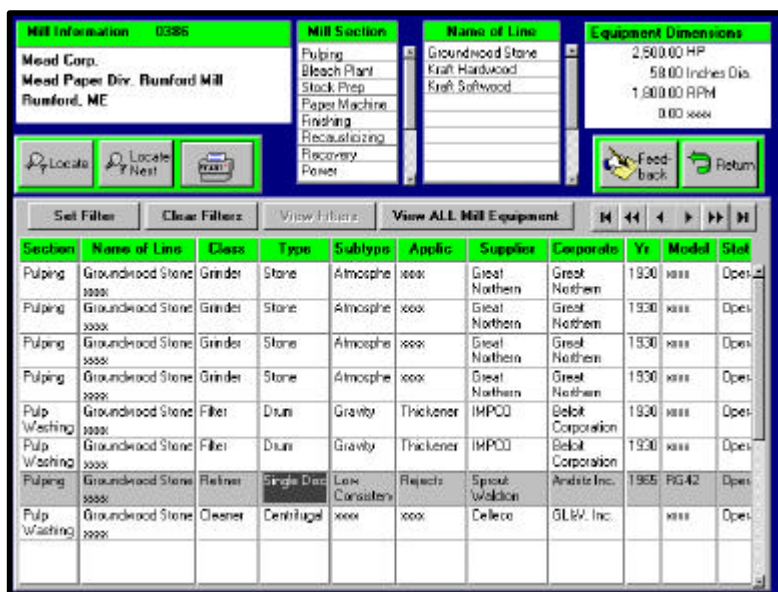
The equipment section of the database provides you with highly detailed information about process equipment and controls, as well as major capital and maintenance projects at the mill. You access this information by clicking the buttons located at the bottom of the main ACCOUNT VIEWER screen.

- PROCESS EQUIPMENT. Describes every major piece of equipment in a mill, including type, subtype, supplier, year of installation and other relevant information.

- PROCESS CONTROLS. Describes DCS and supervisory systems throughout the mill, in addition to scanners, sensors and actuators.

- PROJECTS. Describes capital and maintenance projects over $1 million US, including estimated investment spending and investment and all relevant dates and RFQ, developer's name, description of project scope.

Process Equipment

PROCESS EQUIPMENT shows every major piece of equipment in the mill. The information is grouped by mill section and line. You access this screen by pressing the **Process Equipment** button located at the bottom of the ACCOUNT VIEWER screen.

VIEWING EQUIPMENT FROM MILL SECTIONS

To view equipment from different mill sections, follow these steps:

1. **Click on the *Mill Section* you want to view.**

2. **Click on the line from the *Name of Line* list.**

   The equipment in the lower portion of the screen reflects the mill section and the name of line you have selected.

Note that the *equipment* dimensions will change for each piece of equipment.

Clicking **View ALL Mill Equipment** will list every piece of equipment in the mill, without grouping it by mill section.

PROCESS EQUIPMENT: ALL EQUIPMENT VIEW

To view all of the equipment in the mill, click on the **View ALL Mill Equipment**
button, located in the center of the PROCESS EQUIPMENT screen.

Section	Name of Line	Class	Type	Subtype	Applic	Supplier	Corporate	Yr	Model	Stat
Pulping	Kraft Hardwood xxxx	Digester	Batch	Vertical Pressure	xxxx	Bath Iron Works	Bath Iron Works	1949	xxxx	Oper
Pulping	Kraft Hardwood xxxx	Digester	Batch	Vertical Pressure	xxxx	Bath Iron Works	Bath Iron Works	1949	xxxx	Oper
Pulping	Kraft Hardwood xxxx	Digester	Batch	Vertical Pressure	xxxx	Bath Iron Works	Bath Iron Works	1949	xxxx	Oper
Pulping	Kraft Hardwood xxxx	Digester	Batch	Vertical Pressure	xxxx	Bath Iron Works	Bath Iron Works	1949	xxxx	Oper
Pulping	Kraft Hardwood xxxx	Digester	Batch	Vertical Pressure	xxxx	Bath Iron Works	Bath Iron Works	1949	xxxx	Oper
Pulp Washing	Kraft Hardwood xxxx	Screen	Pressure	xxxx	Primary	IMPCO	Beloit Corporation	1989	xxxx	Oper
Pulp Washing	Kraft Hardwood xxxx	Screen	Pressure	xxxx	Primary	IMPCO	Beloit Corporation	1989	xxxx	Oper
Pulp Washing	Kraft Hardwood xxxx	Screen	Pressure	xxxx	Knotter	IMPCO	Beloit Corporation	1989	xxxx	Oper
Pulp Washing	Kraft Hardwood xxxx	Filter	Compactor Baffle	Pressure	Brownstock Washing	IMPCO	Beloit Corporation	1988	xxxx	Oper

Mill Information   0386
Mead Corp.
Mead Paper Div. Rumford Mill
Rumford, ME

293   pieces of equipment

AT A GLANCE

Special features of the PROCESS EQUIPMENT screen:

Set Filter. You can use the set filter instructions outlined on page 23 to view only certain pieces of equipment.

Locate. Use the Locate instructions outlined on page 22 to find a certain piece of equipment.

xxxx. Viewing an "xxxx" means that field does not apply to that piece of equipment.

Blanks. If you see an empty field, it is because we do not know that piece of information. We will not guess if we don't know the answer

Process Controls: Overview

Within the PROCESS CONTROLS section, you can access several screens of information. Those screens are:

- PROCESS CONTROLS-VIEW BY CONTROL. What each control is measuring.

- PROCESS CONTROLS-VIEW BY LINE. What controls are operating for each line.

- SCANNERS/SENSORS. Location of sensors and what they are measuring.

- ACTUATORS. Shows what actuators are on each machine.

- SOFTWARE. What software is running.

PROCESS CONTROLS: VIEWING BY CONTROL

To view process controls for any mill listing, click on the **Process Controls** button located at the bottom of the main ACCOUNT VIEWER screen. The information listed in the right section of the screen will change depending on the control you have highlighted on the left. Process controls can be grouped either by control or by machine line. To switch views, use the button located in the top right of the screen.

The three lower buttons located in the top right of the screen, gives you access to additional information about scanners, sensors, actuators and software.

AT A GLANCE
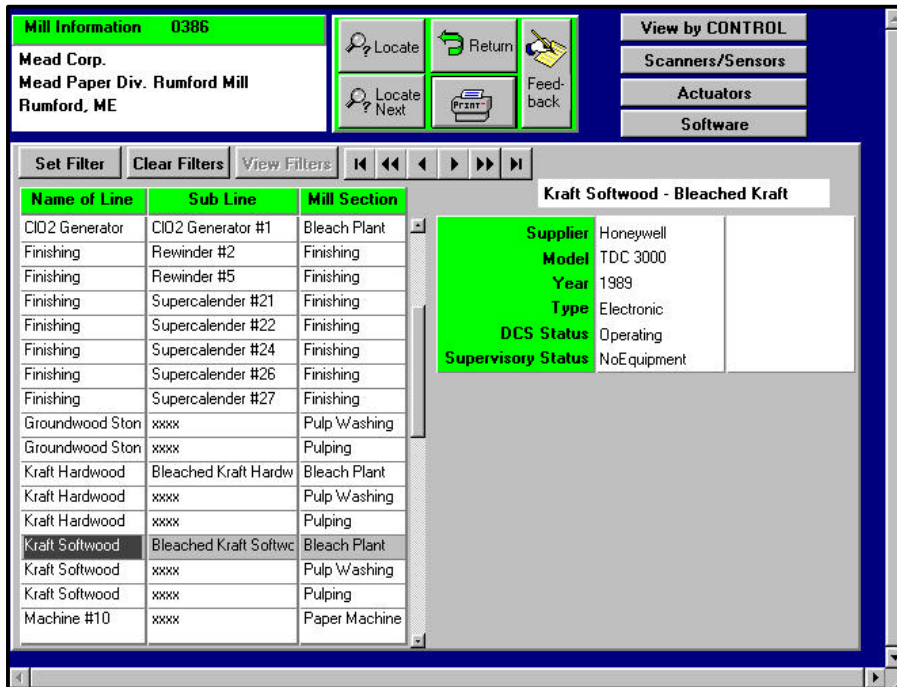
PROCESS CONTROLS provides you with the following information:

Supplier
- Model
- Year supplied
- Type
- DCS Status

- Supervisory status

PROCESS CONTROLS: VIEWING BY LINE

To view process controls by line, click on the **View by LINE** button from the main Process Controls (VIEW BY CONTROL) screen. This screen shows the process controls for each line. The box to the right changes to show detailed information for the line you have selected on the left.

AT A GLANCE

PROCESS CONTROLS provides you with the following information:

- Name of line
- Sub line
- Mill section
- Supplier
- Model
- Year
- DCS status
- Supervisory status

PROCESS CONTROLS: SCANNERS/SENSORS

The SCANNERS/SENSORS screen is reached from the main PROCESS CONTROLS screen, either the VIEW BY CONTROL or VIEW BY LINE screens, and shows where the scanners are located and what the sensors are measuring. Unlike many of the other screens in FPWW, the two sections of this screen (*Scanner Location* and *Sensors*) are unrelated.

AT A GLANCE

SCANNERS/SENSORS provides you with the following information:

- Scanner Location
  - Name of Line
  - Sub Line
  - Location
- Sensors
  - Unit
  - Measurement
  - Status

PROCESS CONTROLS: ACTUATORS

Similar to the SCANNERS/SENSORS screen, the ACUATORS screen is accessed from the main PROCESS CONTROLS screen. Actuator information is grouped by machine. The *Actuator* information that appears at the bottom of the screen will depend on the *Machine* you select in the middle section.

AT A GLANCE

ACTUATORS provides you with the following information:

- Name of Line
- Sub Line
- Actuator
  - Type
  - Unit
  - Subtype
  - Application
  - Supplier
  - Year
  - Model
  - Operating

PROCESS CONTROLS: SOFTWARE

The SOFTWARE screen lists all the software for each machine. You access the screen through the PROCESS CONTROLS menu. The *Software* information at the right of the screen is dependent on the *Machine* you have selected on the left.

AT A GLANCE

SOFTWARE provides you with the following information:

- Name of line
- Software
  - Type
  - Feature
  - Status

Projects

PROJECTS shows all capital and maintenance projects at the mill. You access this information by clicking on the **Projects** button for any mill listing. The information at the bottom of the screen details the project highlighted in the middle section. Project information is updated continuously, with updates e-mailed bi-weekly to clients who purchase this service.

AT A GLANCE

PROJECTS provides you with the following information:

- Project date
- Projects name
- Mill section
- Contact names
- Developer
- Scope

4

THE ANALYZER ™

The ANALYZER: An Overview

Basic Options

Putting ANALYZER to Use

Creating a List

Creating a Table or Graph

Creating a Mailing List

The ANALYZER™: an Overview

The ANALYZER is a powerful and versatile tool that does much of the "brainwork" and nearly all of the "legwork" that goes into finding answers to strategic and tactical questions that relate to information in the database.

You use ANALYZER the way you would use the query tool in a typical database, such as *Microsoft Access.* The difference, though, is that ANALYZER is not only intuitive. It is also customized to the pulp and paper industry. In other words, you don't have to be a database expert to get answers to your questions. ANALYZER gives you drop-down menus, enabling you to make selections by pointing and clicking your mouse. In addition, ANALYZER gives you a variety of output options. You can output information in a list, a pie chart, a stack bar graph, a table, mailing labels or mail merge.

Basic Options

To get the most out of ANALYZER effectively, it helps to understand the rationale behind the different output options. Essentially, you have three options: (1) list; (2) table and graph and (3) mailing list. Here's a brief summary of these options, and why you would choose one over the other.

LIST. List presents a table of data containing one entry for every item you choose to list. You can make a list, for example, of locations, machines, process control systems and individual pieces of equipment.

Typical lists you might want to make include:

- Mills in the Northwestern U.S. that produce recycled linerboard

- Paper machines that use Jagenberg coaters operating at 1500 feet per minute or more

- Digesters made by Kamyr before 1985

TABLE AND GRAPH. Table and graph summarizes information in a way that allows you to see patterns and trends. There are two graphing possibilities: (1) a pie-chart; or (2) a bar-chart. A table accompanies both types of graphs.

Typical questions that would lend themselves to TABLE AND GRAPH would be:

- Mills in the Northwestern U.S. that produce recycled linerboard

- How much printing and writing paper is being made in each country?

- How many on-machine coaters are there by machine supplier and year?

- What are the market shares of newsprint producers?

MAILING LIST. A mailing list is a specialized type of LIST. The MAILING LIST feature helps you create mailing labels and mail merges.

Putting ANALYZER to Use
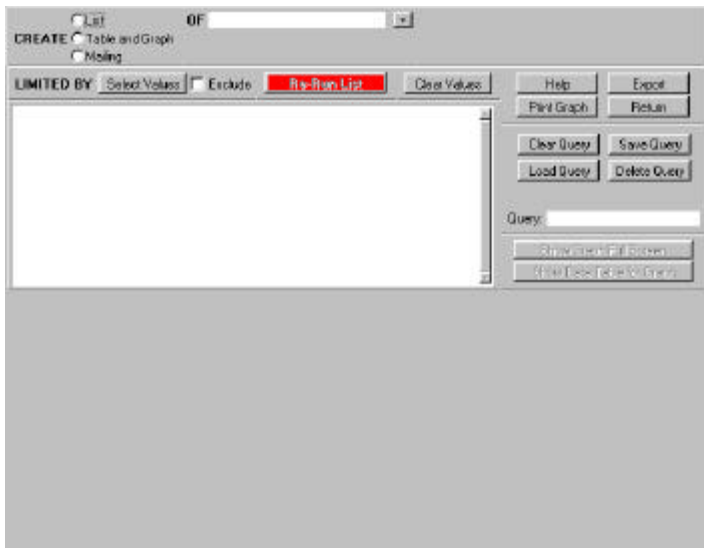
The Main Screen

SELECTION OPTIONS

Selection options guide you through the query process. Here are the key commands:

- CREATE. Lets you select the *way* you want to display the answer to your question. Your choices are: (1) list; (2) table and graph; or (3) mailing list.

- OF. Lets you select what you want your graph to summarize—for example, TPY of paper, number of paper machines or number of pieces of equipment. A drop-down menu will give you your choices.

- BY. (For graphs and tables only) Lets you segment the information in your graph. For a pie chart, you choose the first "By." For a stacked bar chart, you choose both "By's." Your selection for the first "By" will open as the X-axis. The second will appear as the segments of each stacked bar.

- SELECT VALUES. Lets you select the specific portions of the database that are to be included and excluded in your list, graph or table. For example, using **Select Values** to specify the major grade "Newsprint" will cause ANALYZER to include *only* newsprint mills and machines.

  You can use **Select Values** to specify your query in as many ways as you want. For example, specifying the major grade "Newsprint" and the original supplier "Valmet" will return only mills and machines that are (1) made by Valment *and* (2) produce newsprint.

MANAGING QUERIES

The four "Query" buttons (**Clear Query**, **Save Query**, **Load Query**, and **Delete Query**) help to simplify the querying process. Once you've created a query that you intend to reuse, you can give it a name and store it (using **Save Query**) and then retrieve that same query with **Load Query**. **Delete Query** lets you erase any queries you've saved. **Clear Query** removes the current query from the screen but has no impact on a saved query.

OTHER ANALYZER OPTIONS

Other options available to you in ANALYZER include the following:

- **Export**. Lets you export the results of list, table and graph queries to a spread sheet or other software applications.

- **Print**. Prints a report of the results of your query.

Creating a List

Now that you know something about the general concepts that underlie the use of ANALYZER, you're ready to put the tool to use. We'll start with the simplest and most direct of all ANALYZER functions: the LIST. As you will see, the basic steps that go into creating the list are also used when you want to create a table and graph or mailing.

In the example below, we are seeking to compile a list of *all the mills in France, Germany, and Italy that make newsprint on machines that run over 3000 fpm.* Here are the steps:

1. **Click on "List" option on opening ANALYZER menu.**

    Clicking on **List** button to the right of **Create** will produce a drop down menu that gives you several options.

2. **Choose "Paper Machines - Detail" from the list of options that appear on the drop-down menu.**

    "Paper Machine - Detail" will now appear in the **OF** box.

3. **Click on "Select Values."**

    The first drop-down menu will give you a choice of categories of information to choose from. When you click on the option **Location**, you'll have several choices.

   If you select "Country," the following screen will appear:
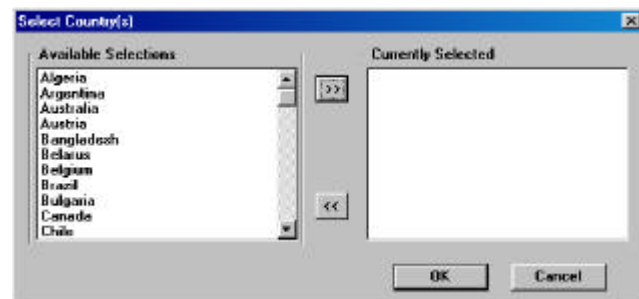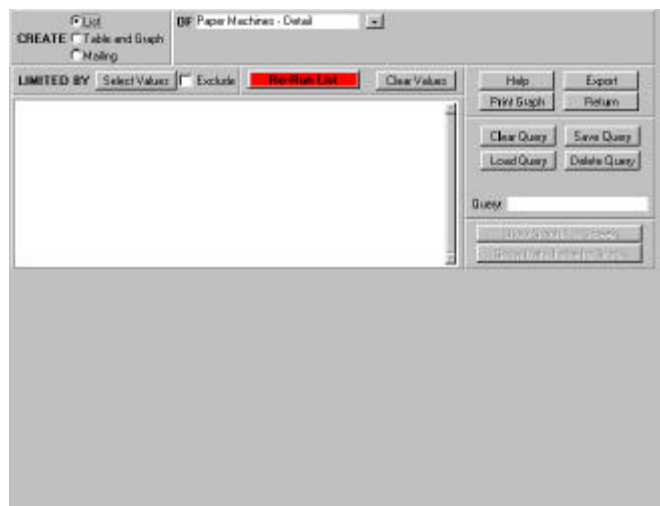
Creating a List, cont.

4. **Make your selections.**

You select values one group at a time. In the example we are using, you would scroll down the list of options in the left-hand column until you come to "France." After highlighting "France" and clicking on the double arrow pointing to the right, repeat the process for "Germany" and "Italy."
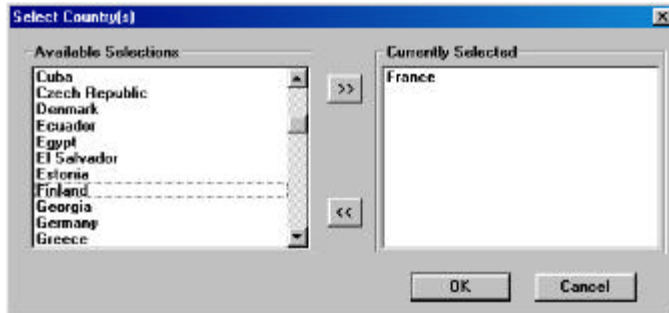
When you click on **OK,** you'll be returned to the original screen, and the limit you've set will be recorded in the white area of the screen, as in the following illustration:
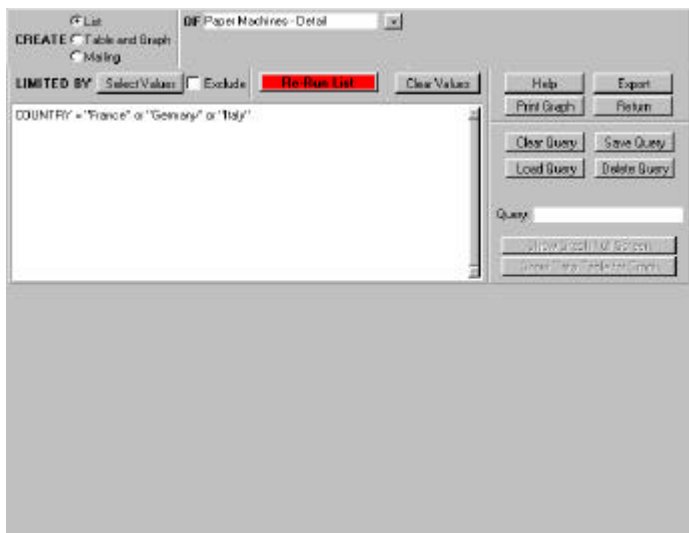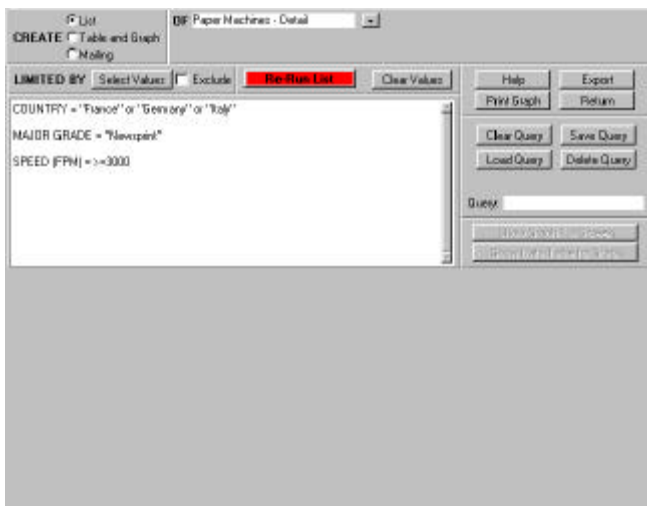

Creating a List, cont.
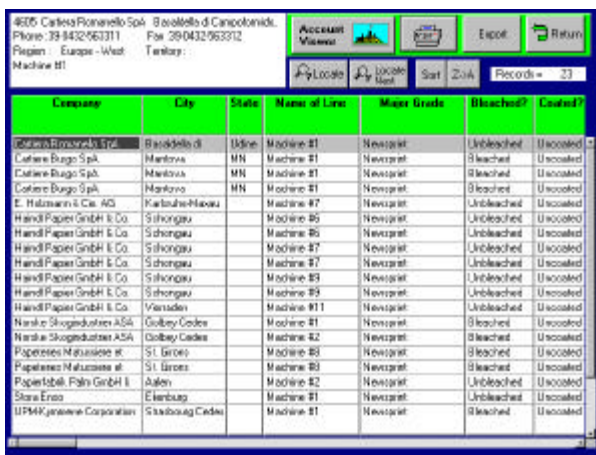
5. Select additional values.

To set additional limits on your query, follow the same procedures as above for each new criteria you want to use.

- Click on **Select Values.**
- Make appropriate selections from drop-down menu.
- Transfer selected values from the left-hand column to right-hand column.
- Click on **OK.**

Repeat these steps to specify *Major Grade* as *Newsprint* and *Machine Speed* as *<=3000 fpm.*

**6. Click on the red "Re-Run List" button to create your list.**

The list produced by the criteria set in this example is shown to the right.

Note: By clicking on the **Account Viewer** button, you can quickly go to the ACCOUNT VIEWER. The mills listed will only be those mills that meet the criteria of your list.
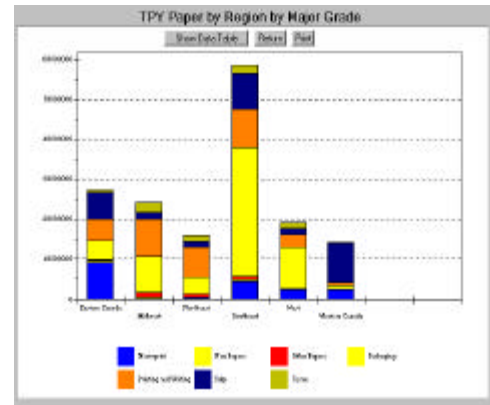
Graph Options

There are two general categories of graphs: (1) pie chart; and (2) stacked bar chart.
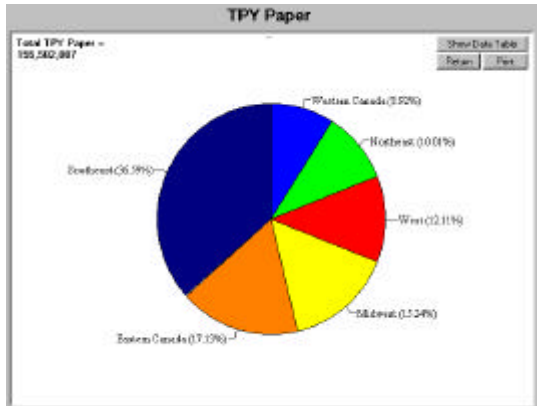
Pie chart   **Stacked Bar chart**

Pie Chart. A pie chart, as the illustration above shows (in this instance TPY paper production), breaks down a sum with *one* variable (in this instance, regions).

A Stacked Bar Chart. A bar chart displays the answer to queries in which there are *two* variables. In the example above on the right, the bar chart shows TPY of paper by region, and then by grade. Stacked bars have three elements:

> **Y-Axis:** (Vertical line) Answers the question "How much?" or "How many?" (Example: TPY Paper)

> **X-Axis**: (Horizontal line) Represents the initial variable – in ANALYZER, the first "By" (Example: Region)

> **Stacks of each bar**. Represent yet another variable—in ANALYZER, the second "By" (Example: Grade)

BAR CHARTS: A CLOSER LOOK

The two bar charts depicted on this page illustrate two ways of displaying the same information. Both charts display answers to the query "How much paper is being produced per year?"

In the first of the two examples below, the first "By" (Y-Axis) is the *region*, and the second "By" (bar stacks) segments each region by *major grade*. In the lower example, the X-axis and the bar stacks are reversed.
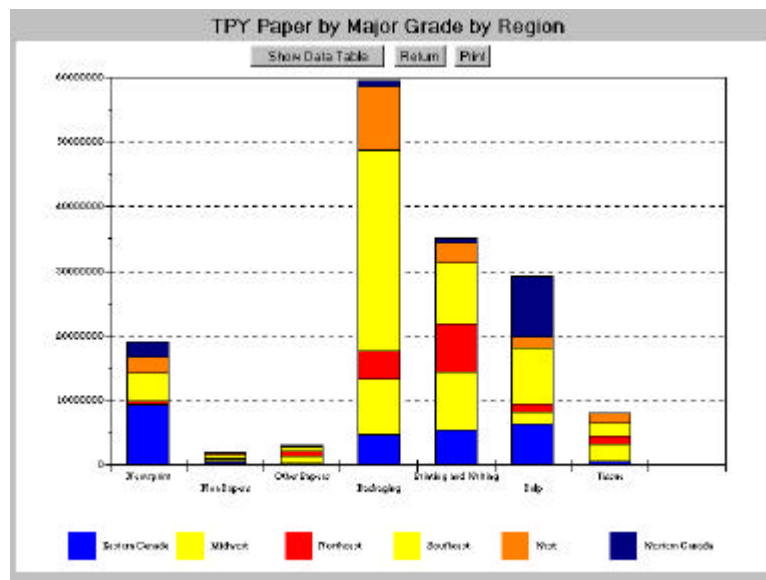
Y-Axis: Tons of paper (TPY)

X-Axis: Region

Bar Stacks: Major Grade
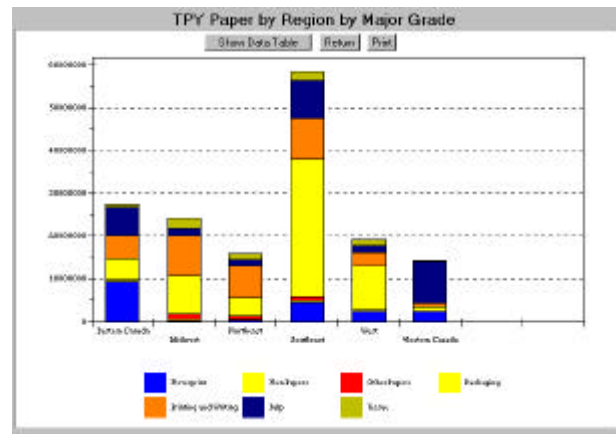
Y-Axis: Tons of paper (TPY)

**X-Axis:** Major Grade

Bar stacks: Region

Creating Tables and Graphs

The steps needed to create tables and graphs are similar in most respects to the steps you took when creating a list. The difference is that tables and graphs require you to make an additional selection or two.

CREATING A PIE CHART

A pie chart is a graph consisting of two elements: a "pie" and its "slices." The "pie" represents the sum of an item in the database—for example, number of paper machines. The "slices" represent how you want that information segmented. Here are the steps:

1. **Click on the "Table and Graph" button in left-hand corner of screen.**

2. **Click on the "OF" button to choose the *pie*.**
   Example: # Paper Machines

3. **Click on the top "BY" to determine how to *slice up the pie*.**
   Example: Major Grade

4. **Set limits to your query by using Select Values.**

   Example: Mills in North America (U.S., Canada and Mexico)

5. **Click on Re-Run Graph.**

   This step will produce the graph shown to the left.
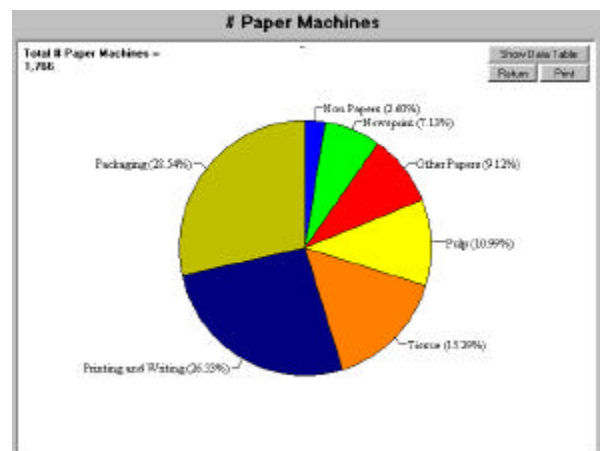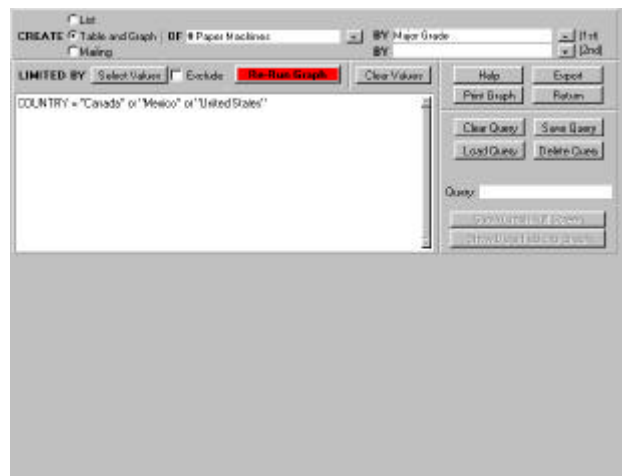
CREATING A STACKED BAR CHART

The procedure for creating a stacked bar chart is similar to the procedure for creating a pie chart, but with one added step: a second variable to specify the content of the bar stacks.

1. **Choose "Table and Graph."**
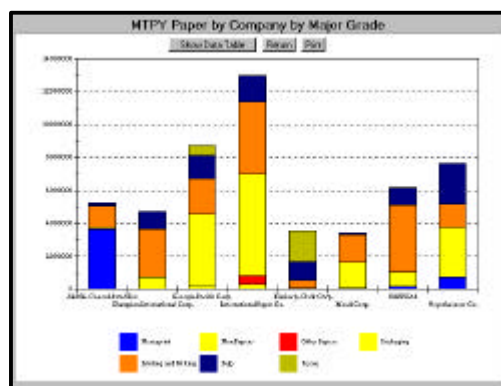
2. **Make selection from the "OF" menu.**

   This sets the information for the Y-axis (the vertical line) of your chart.
   Example: MTPY Paper

3. **Make selection for the first "By" box using drop down menu.**
   This box sets your X-axis.
   Example: Company

4. **Make selection for the second "By" box using drop down menu.**

   This box selects the bar stacks. *Example*: Major Grade.

5. **Use Select Values to specify what mills, machines, etc. to include in your query .**

Creating a Mailing

You can use any of the lists you create in ANALYZER as the basis of a mailing list.

PREPARATORY STEPS

You begin the process of creating a mailing list by clicking on the **Mailing** button on the opening ANALYZER menu.

In the example below, we are seeking to compile a list of the *General Managers and Maintenance Managers of mills in North America that produce a Major Grade of Newsprint.* Here are the steps:

1. **Click on "List" option on opening ANALYZER menu.**

   Clicking on **List** button to the right of **Create** will produce a drop down menu that gives you several options.

2. **Choose "People" from the list of options that appear on the drop-down menu.**

   "People" will now appear in the **OF** box.

3. **Click on "Select Values."**

   The first drop-down menu will give you a choice of categories of information to choose from. When you click on the option **People**, you'll have three choices.

   By selecting "Job Function," the following screen will appear:
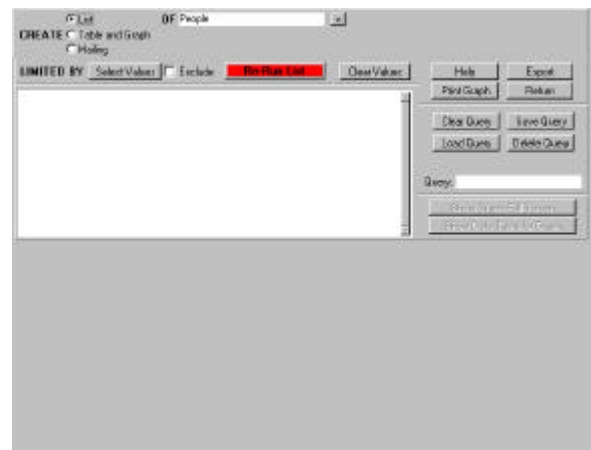
Creating a Mailing, cont.

4. Make your selections.

You select values one group at a time. In the example we are using, you would scroll down the list of options in the left-hand column until you come to "General Manager." After highlighting "General Manager" and clicking on the double arrow pointing to the right. Repeat the process for "Maintenance."
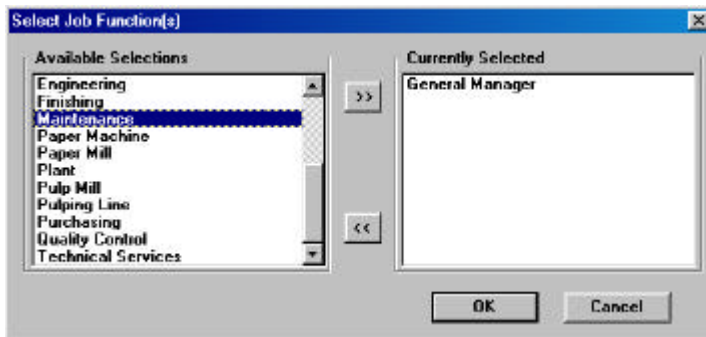
When you click on **OK,** you'll be returned to the original screen, and the limit you've set will be recorded in the white area of the screen, as in the following illustration:
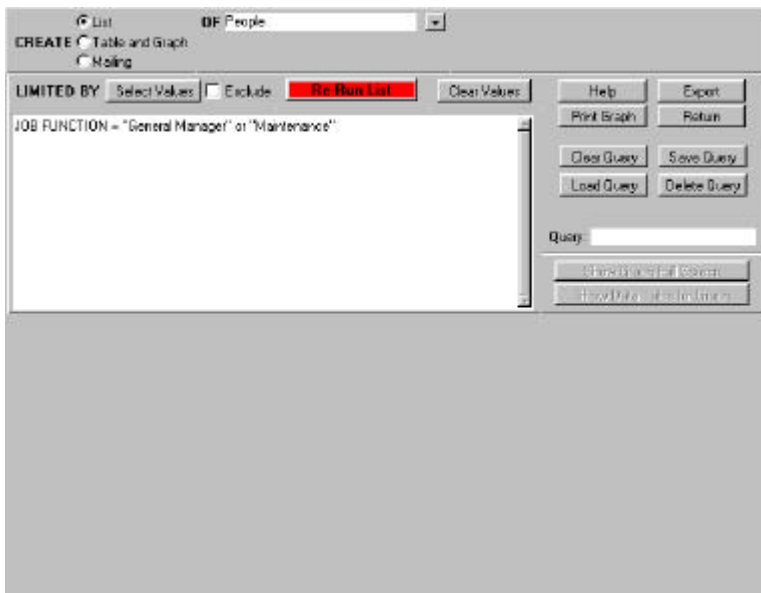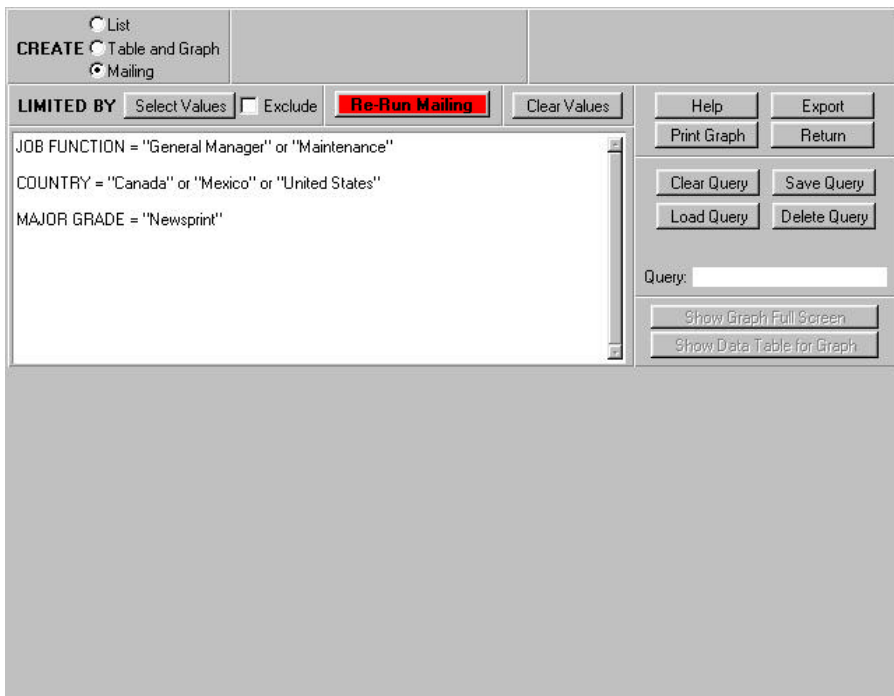
Creating a Mailing, cont.

5. **Select additional values.**

   To set additional limits on your query follow the same procedures as above for each new criteria you want to use.

   - Click on **Select Values.**

   - Make appropriate selections from drop-down menu.

   - Transfer selected values from the left-hand column to right-hand column.

   - Click on **OK.**

Repeat these steps to include criteria for mills in the U.S., Canada and Mexico that produce a major grade of newsprint. The screen will look as follows:

Fisher
International, Inc.

Creating a Mailing, cont.

6. Click on the red "Re-Run List" button to create your list.

The list produced by the criteria set in this example would look as follows:

7. Use Delete Options (optional).

The "Delete Options" box that appears when the list turns up on your screen gives you the opportunity to customize the list you've created. The option appears automatically when you click on the red **Re-Run List** button.

SETTING UP MAILING LABELS

The process for setting the specifications for the mailing (label design, etc.) begins after you have brought to the screen the list that is to be the basis of the mailing. The screen depicted to the right meets the following specifications*: All general managers and maintenance managers of mills in the U.S., Mexico, and Canada in which the major grade is newsprint.* By clicking on the red **Re-Run Mailing** button**,** you will bring that list to the screen, as depicted on the right.

You're now ready to create the specs for the mailing labels. Here are the steps:

1. **Click on Print Labels** button**.**
   Clicking on the **Print Labels** will bring a menu that will enable you to decide on what field(s) you want the labels to be sorted—that is, in what order they will come from the printer. In the example below, we've selected "country" as the primary sort, followed by "zip code."

2. When you finished the sorting process, click on OK.

When you click, OK, the menu to the right will appear on the screen. You now have two choices: you can print out these directions or simply proceed by clicking on the **Continue to Print Labels** button at the bottom of the screen. When you do, you'll see the menu that shown below which give you options for label sizes.

Directions for creating labels

1) Follow the Label Expert screens.

2) The third screen asks: Select the table or query that contains the information required for your labels.
   a) Select **Browse** and either:
     i) Press [shift]-[insert] to automatically insert the table name
     ii) Type the following into the **File name:** fpfww:mailing

   b) Click OK

3) Continue with Label Expert screens

4) After completing your labels, close the file and click the **X** in the minimized **create label** box located at the bottom of your screen. This will bring you back to your mailing list.

[Continue to Print Labels]   [Return]   [Print Directions]

3. Select label type and size and click on "Next."

FPWW uses standard Avery labels. If you are using another type of label or if your label does not appear on the list, select **New Label** and enter the dimensions of your label. After you have made your selection, click on **Next**. This command will automatically bring to screen a menu for **Mailing Expert**, a program for designing the label.

Mailing Label Expert

Identify the kind of labels you are going to use by specifying a label category and a label type.

Label Category:
Avery Address Labels   [New Label ...]

Label Type:
5160 - Address
5161 - Address
5162 - Address
5163 - Address / Shipping
5164 - Address / Shipping
5260 - Address
5261 - Address

Description:
2.63 in. wide
1.00 in. high
30 per sheet
10 rows
3 columns

[Help]   [< Back]   [Next >]   [Cancel]
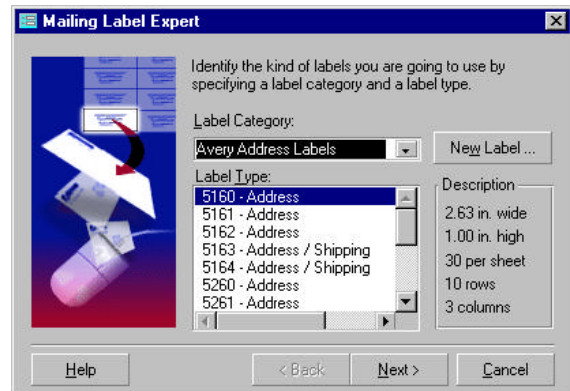
Setting up Mailing Labels, cont.

4. **Open the list you've created.**

The mailing list you created is stored temporarily in a private directory. The steps to locate that list are as follows:

- **Click on Browse in the Mailing Label Expert**

When you click on **Browse**, the following box will appear on the screen. You need to specify where the mailing list has been saved. FPWW automatically saves the list you've created in a private directory.

There are two ways you can open your list:
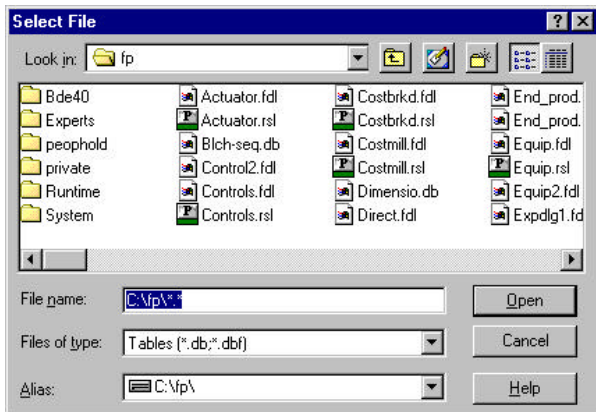
- **Type in ":priv:mailing" in the highlighted box.** *(File Name)*

- **Press down the Shift key and Insert key at the same time.** (Doing so will automatically insert ":priv:mailing" in the *File name* box.)

- **Click Open.**

Either of these steps will move you to the next step in the **Mailing Expert** process. You will see the following screen:
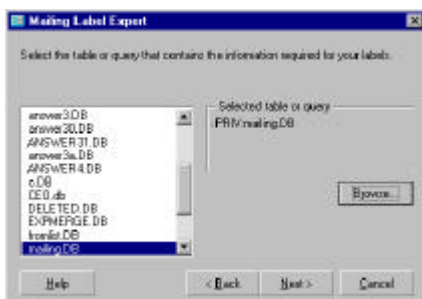
Setting up Mailing Labels, cont.

5. Select label format.

After opening your table, the following screen will appear. Once you have set the font and size, click **Next**.

You'll then be given an opportunity to determine how you want the label sheet to feed into the printer and the order in which you want the labels to appear on the sheet.

6. Choose label entries.

The next step in the process is to indicate how, exactly, you want the the label to read. Here's a summary of the commands:

- **Placing fields in the label**. You place fields in the label by clicking once on the field you want to place, and then by clicking once on "Place Field."

- **Adding field names to the same line in the label.** When you want to add more than one field to a line (Example: First Name *and* Last Name), leave the cursor on the gray bar and add the next field. You will need to enter any spaces or punctuation between fields. (Example: {City}, (space) {State}).
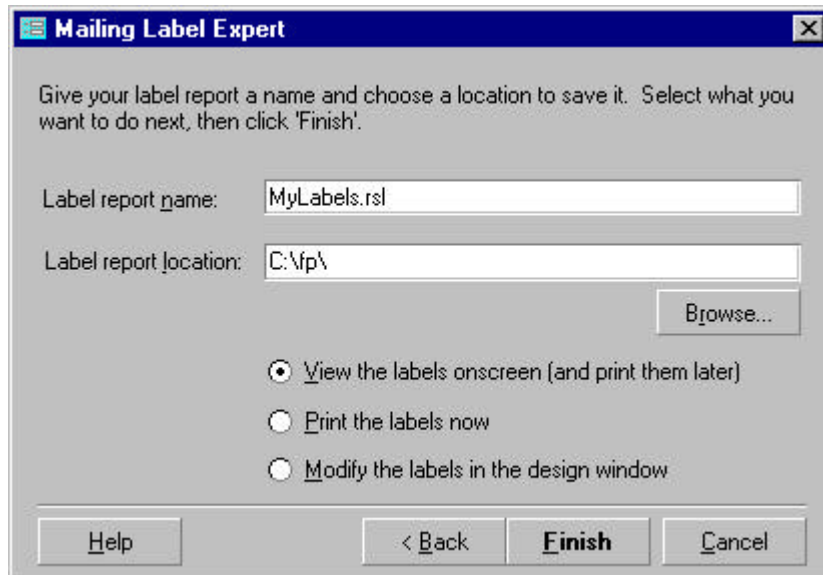
- **Creating a new line in the label.** When you want to create a new line in the label, move the cursor below the gray bar and click once. This will create a new gray bar and allow you to insert whatever field you want to insert.

- **Editing.** You can edit any line with keystrokes, and remove fields using the delete key. Please do not type the fields onto the gray bar. Rather use the highlight-place field sequence.
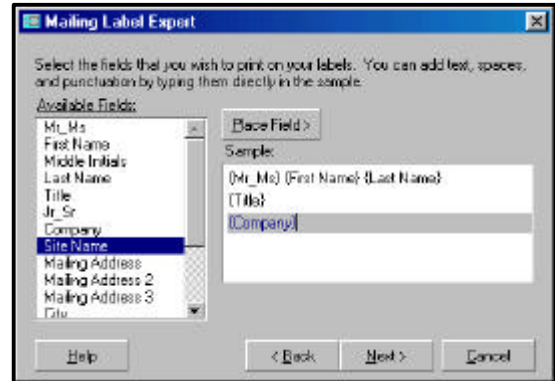
When you've completed laying out your labels, click on **Next.**

7. Create a name for the label report.

Once you have set the label up and have clicked on "Next," you need to name the label report you have just created. Enter a name for your report and click **Next.** You then have three choices. You can view the labels on screen, print them, or modify the design. Each instruction will prompt you to the next step.

MERGING LISTS INTO OTHER PROGRAMS

Once a mailing list has been created in ANALYZER, it can be merged with a document you have created in a word processing program such as Microsoft Word or Word Perfect. The steps are as follows:

1. **Click on the "Mail Merge" button.**

   A menu will appear containing instructions. If you choose to, you can print the instructions, or move on by clicking **Continue to mail merge**.
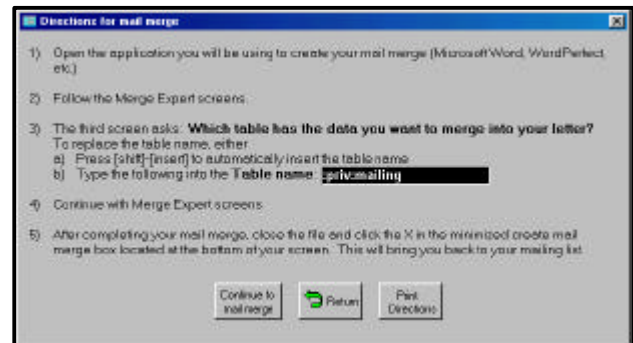
2. **Choose "Create new merge setting" from the Merge Expert screen and click Next.**

3. **Select the word processing program you are using for your form letter.**

4. **Indicate if your form letter already exists and click "Next."**

   If your have already created the letter for your mail merge, select "yes" and type in the file name or use the **Browse** button to locate your letter and click **Next**. If you have not already created your letter, select "no." The program will link your mail merge fields to a new, blank document.
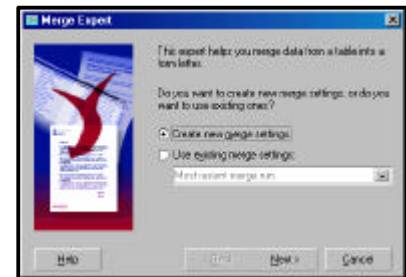
Merging lists into other programs, cont.

5. Select the table.

The mailing list you created is stored temporarily in a private directory as a table. The location and name of that table is ":priv:mailing" You change name in the *Table name* box. You can insert the table name and location two ways:

- **Hold down the Shift key and Insert key at the same time.**
- **Type ":priv:mailing" in the *Table name* box.**
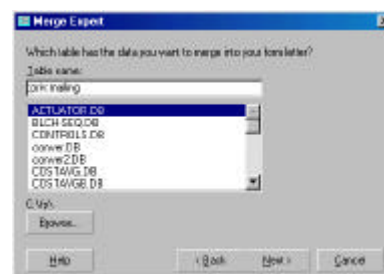
6. Sort the labels.

This step enables you to decide on what field(s) you want your form letter to be sorted —that is, in what order you want your labels to be created. In the example to the right, we selected "Country" as the primary sort, followed by "Zip Code."
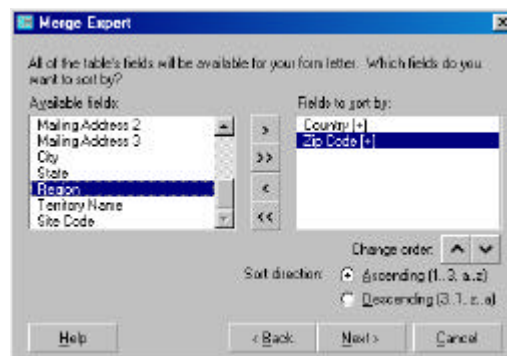
7. Changing field format.

The next screen gives you the option of changing the format of each field (Example: "Mr." can appear three ways: "MR.," "Mr." and "mr.") We recommend using the default setting.

8. Save merge settings (optional)

You're given the opportunity at this point to save the merge settings you've set. On the same menu you'll also be asked to type a name for the new document that is going to be the basis of the merge if you are not using a letter you've already created.

Merging lists into other programs, cont.

9. **Click Finish.**

   Once you click on **Finish**, ANALYZER will assemble the list and automatically open the word processing program you've selected. If you have indicated an existing file, the program will open to that file. Otherwise, a new document will be opened.

   From this point on, you need to follow the mail merge procedures of your word processing program.

SAVING OPTIONS

Once you have created and customized a list, you can save your modified table. The steps are as follows:

1. **Click on the "Table Options" button.**

2. **Click on "Save Table" on the next menu.**

3. **Name your table.**

When you want to load a table, simply create another list of people and go to **Table Options** and select **Load table**.
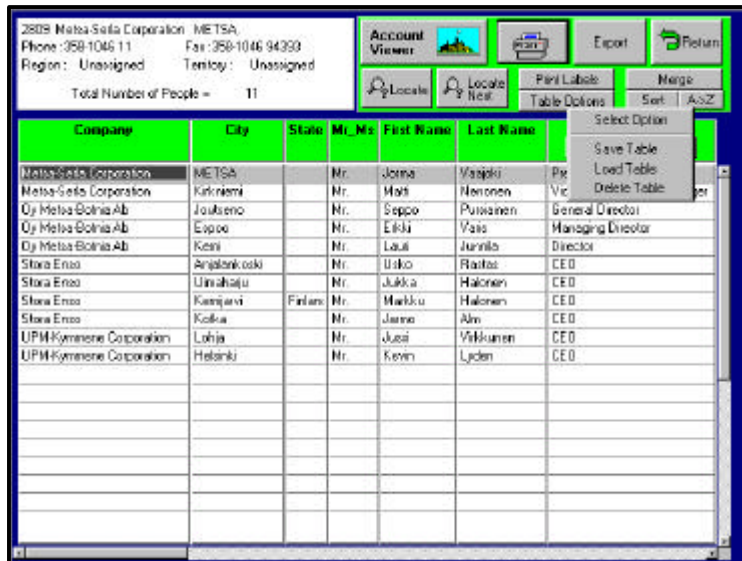
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EXPORTING AND LINKING

Exporting from ANALYZER

Linking FPWW to Microsoft Access

Exporting from ANALYZER

All lists, tables and mailing lists you create in ANALYZER can be exported. The steps are as follows:

1. **Click on Export.**

2. **Select the application or format you want to export to.**

3. **Name your file and click OK.**

4. **Note the exact location your file is saved in.**

   This location is usually in a private directory located in the root directory where FPWW is installed.

   Example: c:\fp\private\ceo.xls
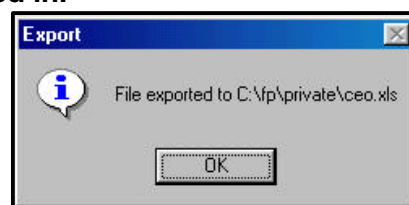
5. **Open the program you want to import to and use the import command.**

Note: If you are exporting to MS Access, you need to export the file to a Paradox Table or Excel Spreadsheet first and then "Link/Attach" or "import" the table. Please refer to the "Using ANALYZER with MS Access." (See next section.)

Linking FPWW Tables with Microsoft Access

You can query FPWW directly from Microsoft Access without importing any tables! The steps for creating an Access 2.0 database that links to FPWW tables are as follows:

1. **Open Access and use the File menu to open FPWW.**

   The file name in the FPWW directory is "fp95.mdb"

2. **Go to the "Forms" tab and open "FP Table Utility." The following menu will appear:**
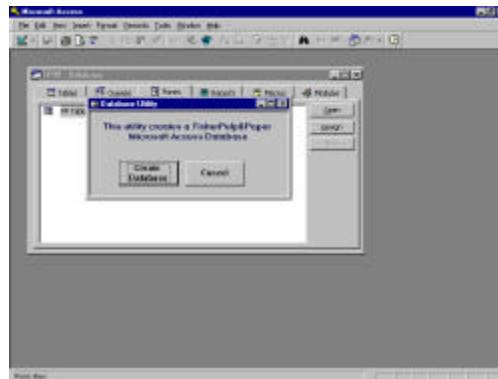
3. **Double click on "Create Database" and click on OK.**

   Note: If FPWW tables do not appear under the tab "Tables," exit Access and load the Paradox drivers. The steps are as follows:

   - **Run** setup.exe **from your Microsoft Access installation disk or CD-ROM**
   - **Select "Add/Remove"**
   - **Select "Access," "Change Options"**
   - **Select "Data Access"**
   - **Select "Microsoft Paradox Driver"**
   - **Press "OK" to install component**

MICROSOFT ACCESS OFFICE 97 USERS:

If you are using MS Access 97, the Paradox drivers are located on the Microsoft Office 97 CD-Rom as part of the Value Pack. To install the drivers, run dataacc.exe from the CD-ROM. Follow the steps outlined on page 85, but use the form "fp97.mdb."

RUNNING ACCESS 7.0 WITH FPWW-NETWORK INSTALLATION

In order for multiple users to utilize FPWW tables in Access, you will need to do the following "Registry" edits for Access:

1. **Go to Start | Run.**
2. **Type "regedit" and click OK.**
3. **Navigate to \HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Jet\3.0**
4. **Make changes in \Engines\Paradox**

Important: "ParadoxNetPath =" must match the one you set in the BDE Configuration. Enter the directory where the Ppdoxusrs.net file resides.

> *Example*: p:\fp\net
> Enter ParadoxNetStyle = "4.x"

APPENDIX

Links between Tables

Table Descriptions

Cost Component Definitions

LINKS BETWEEN TABLES

Table	Site Code	Name of Line	Sub Line	Grade Code	Company	Person Code	Project ID	Product Description	Control Name
Actuator	●	●	●						
Controls	●								●
Costavg	●							●	
Costavgb	●							●	
Costbkdn	●							●	
Costcorp	●							●	
Costmill	●							●	
Ctrllocn	●	●							●
end_prod	●	●		●					
Equip	●	●	●						
Fuel	●		●						
Furnish	●	●							
Linedesc	●	●							
Millinfo	●				●				
Owner%	●				●				
Paper	●	●		●					
People	●					●			
Peopmail						●			
Peopnote						●			
Peopresp	●	●				●			
Peoptel						●			
Price	●								
Project2	●						●		
Projects	●						●		
Pulptype	●	●							
Recycled	●	●							
Salesman	●								
Salesterr	●								
Sensors	●	●	●						
Water	●								
Watertmt	●								

The database is made up of many tables, each containing information on a different subject. Each table is "linked" to another table by a common field. Therefore, these tables make up a relational database.

The grid on the left lists all of the tables involved in FPWW in the left column. Across the top of the grid are field names that serve as common links within the tables.

The boxes that contain bullets (●) show the common elements between the tables.

These links will be useful if you are using a database engine (like Access, Paradox or Foxboro) to create your own queries outside of FPWW.

TABLE DESCRIPTIONS

Actuator	Lists actuators and their location on paper machines and coaters
Controls	Lists process control equipment
Costbkdn	Lists cost components per grade of paper by mill
Costmill	Lists total cost by mill by grade of paper
Ctrllocn	Identifies mill location of process control equipment
End_prod	Lists finished products by grade of paper
Equip	Lists all process equipment
Fuel	Lists fuel used by boilers
Furnish	Lists fiber used by paper machines
Linedesc	Lists original installation date and supplier of each production line
Millinfo	Lists paper mill address and general mill information
Owner%	Shows percentage of ownership for each mill
Paper	Name of paper machine and description of paper grade
People	Lists mill and corporate personnel
Peopmail	Lists mailing lists
Peopnote	Lists notes entered for personnel
Peopresp	Lists people by areas of responsibilities
Peoptel	Lists personal telephone numbers
Price	Lists price data for various grades of paper over many years
Project2	Lists mill sections for projects.db
Projects	Lists capital and maintenance projects for mill
Pulptype	List of pulping lines and their production
Recycled	Lists types of waste paper
Salesman	Lists salesmen assigned to individual mills
Salesterr	Lists sales territories
Sensors	Lists sensors on paper machines
Water	Lists water usage and sludge
Watertmt	Describes water treatment and related equipment

COST COMPONENT DEFINITIONS

Chemicals

Chemical cost estimates have been made for the various process areas involved in the manufacturing of each grade of paper. These generally include pulping, bleaching, papermaking and other mill areas (water, waste water treatment, etc.).

Fiber

Wood costs are estimated on a regional basis. Regional wood costs may be adjusted for particular circumstances within a region based on available information. Average regional wood densities are used to convert prices from a volumetric basis to a weight basis.

Energy

Estimates for both fuel and electrical power consumption are based upon the grades produced and the process equipment used to produce them. Credits are estimated for by-products such as waste steam, hog, and black liquor where applicable.

Labor

Labor costs are estimated quite accurately for the U.S. mills with manning and wage data available from industry sources. Data for Canadian mills comes from statistics on safety performance which include annual man-hours worked. This data is supplemented by industry contracts, published articles, directories, etc.

Material

Material costs are estimated using an approach developed from historical data which relates maintenance material costs to maintenance labor costs, plus additional direct costs depending on the products produced. Materials, sometimes called consumables, include maintenance parts, contract maintenance, supplies, shipping supplies, felts, wires, and other incidental costs not included in natural expense categories.

Delivery

The average distance from each mill to its most likely market was established by summarizing industry shipments by state and region on a map. This distance was multiplied by an average cost per ton per mile. This cost is based on actual data and our estimates of domestic truck shipping costs.

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